originals (any pharmaceutical released before 01/08/1987, per 2007 decree). The product reference price was assumed to be 100 for all groups. The effect of amended regulations was estimated for all five product groups by applying the changed discount rates to the reference price throughout the years 2004 to 2011. **RESULTS:** The reference price in 2004 was considerably different than in 2012. The price of original products without generics decreased from 100 to 59. The price of generics, and original products with generics decreased to 47.5. The 20-year-old original and generic products were affected the least, as the price of the 20-year-old original products decreased to 69.1 and of generics to 71.3. The different effects of regulations on each product group indicate that companies are heterogeneously affected depending on inventory. **CONCLUSIONS:** Drug groups were not uniformly affected by the regulations. With less overhead and expenses (e.g., clinical trials, marketing, promotions), generic drug manufactures are more easily adaptable to new regulations and market conditions. This may cause a shift to extensive production of generic medications in the Turkish pharmaceutical industry and decrease research and development investments.

PHP64

EVALUATION OF PUBLIC PERCEPTION TOWARDS MEDICINE QUALITY AND PRICES IN AFGHANISTAN

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OBJECTIVES: To evaluate Public Perception towards Medicine Quality and Prices in Afghanistan. **METHODS:** A cross-sectional descriptive survey involving 1282 population in six zones of Afghanistan was undertaken. **RESULTS:** The study findings revealed that a total of (50.2%) of respondents agreed that imported medicines and (41.4%) said that locally manufactured medicines have good quality. High proportions (61.4%) of Afghan doctors are prescribing quality medicines, and also medicines given by public hospitals in Afghanistan are of high quality (54.9%). (38.4%) agreed that the afghan drug regulatory authority controls quality of medicine. Interestingly, (96.3%) respondents were agreed, that Afghan government should adopt health policies to control the medicine prices and expenditure. (89.6%) respondents agree that higher medicine costs negatively impacts patient outcomes. Half of the respondents (44.5%) say that in Afghanistan doctors have poor understandings on medicine prices. (68.7%) of respondents agreed that the price regulation system should be implemented from manufacturer to patients. When respondents asked, (94%) agreed that all medicine need to be disclosed on the dispensed medicine label. A round, (19.9%) of respondents agreed that medicine prices in Afghanistan are affordable to everyone. (93.1%) of the respondents said, prescription drug prices need to be regulated by the government. When respondents asked (68.2%) agreed that medicine prices are high in private hospitals. **CONCLUSIONS:** The first national survey on medicine quality and pricing, suggests that, the government should take firm steps to control the quality and disparate medicine prices, to ensure accessibility, availability and affordability of medicine to all. The drug regulatory authority has less control to regulate medicine quality and prices, due to critical factors, e.g. lack of qualified staff and quality control lab, insufficient salaries and corruption. No medicine pricing policy is in place and pro-poor medicine pricing policy development is crucial.

PHP65

QUALITY OF CARE: REFERENCE AND COUNTER REFERENCE FROM FAMILY PHYSICIANS AND RHEUMATOLOGISTS' PERSPECTIVES– A PILOT STUDY

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OBJECTIVES: To delineate family physicians' and rheumatologists' point of view when primary care is facing cases of rheumatic diseases. To experimentally identify barriers in the reference and counter reference. **METHODS:** This is a pilot study, transversally designed, with family physicians and rheumatologists in a single city. Methodological steps: 1) Development and preparation of three clinical scenarios that simulate and address different levels of clinical severity; 2) application of these scenarios in the sample; 3) validation of the study scenarios. Final scenarios: a) *Scenario one:* patient with an autoimmune disease diagnosis presenting fever and fatigue; b) *Scenario two:* patient with fibromyalgia and with poor adherence to the health care plan, requiring a medication to relief the symptoms; c) *Scenario three:* patient with septic arthritis, prostration, and in poor clinical conditions. Decisions to be chosen: Decision 1: To apply a health care plan (investigation and/ or treatment) and refer to a rheumatologist; Decision 2: to prescribe medication and do not reference to rheumatologist; Decision 3: to refer to a rheumatologist with no primary care intervention. Afterwards, a multiple-choice questionnaire addressing potential factors that lead to barriers in the reference and counter reference process was applied. Descriptive analysis was performed to map the results and bootstrap method for constructing hypothesis tests. **RESULTS:** Twenty-two family physicians and rheumatologists were involved. For *Scenario one*, the majority of interviewee chose Decision 1 [1.27 (1 –3), SD 0.59)]. For the *Scenario two*, respondents chose the decision 2 [2 (1 – 3), SD 0.76)]. For the *Scenario three, decision three* was the preferred [1.47 (1 –3), SD 0.83)]. For the reference and counter-reference evaluation, interviewee considered that there is a poor communication between family physician and rheumatologist [4.2 (2 – 5), SD 1.01)]. **CONCLUSIONS:** Proper communication seems to be a hurdle for the reference and counter reference system.

PHP66

SOCIOECONOMIC INEQUALITIES IN HEALTH IN URBAN PAKISTAN

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OBJECTIVES: The objective of this analysis is to examine socioeconomic inequalities in health. It investigates whether, and to what extent, household economic status and other socio-demographic variables are associated with the health of individuals residing in urban areas of Pakistan. **METHODS:** The study uses data from the Pakistan Socioeconomic Survey (PSES) and analysis is based on 11,069 individuals who belong to 1,435 urban households. Health status is based on self-reported morbidity during the two weeks preceding the interview. Household economic status is measured by a wealth index constructed using data from the survey on ownership of durable assets and housing conditions. Principal components analysis (PCA) is used to construct the index and households are categorised into quintiles by PCA scores. The logistic regression is used to estimate the effects of various social, demographic, economic and regional characteristics of individuals/ households on health status. **RESULTS:** Overall, 12.7% individuals reported any health complaint during the two weeks preceding the interview. Male household members have lower prevalence of morbidity (10.6%) compared to females (14.9%). A total of 17.6% members of the lowest quintile reported any health complaint compared to 11% of the highest quintile. Furthermore, highest morbidity was reported by members of Muslim households (12.9%), widowed/divorced/separated members (26.2%), those with no education (16.8%), agriculture/fisheries workers (18.3%) and those residing in urban areas of Balochistan (14.2%). The logistic regression exhibits a strong significant ($p<0.01$) association between household economic status and health status. Members of poorest, poor, middle and rich households are significantly ($p<0.01$) more likely to report any health complaint compared to members of the richest households, controlling for gender and age, religion, marital status, education, occupation, and residence in an area. **CONCLUSIONS:** Socioeconomic inequalities in health are widespread in urban Pakistan. Public health policies aimed at reducing gaps between health status of poor and non-poor need to be initiated.

HEALTH CARE USE & POLICY STUDIES - Formulary Development

PHP67

REVIEW OF THE CURRENTLY LISTED DRUGS IN SOUTH KOREA

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OBJECTIVES: A review of the entire currently listed drugs that had been eligible for subsidy was carried out by the Health Insurance Review and Assessment Service (HIRA) in South Korea. As a result of this review, the government can decide whether a drug should no longer be on the reimbursement drugs list. This study described how these reviews were carried out and the currently listed drugs were changed. **METHODS:** The currently listed drugs were divided into a total 49 therapeutic groups. The cost-effectiveness analyses were conducted to review of the first therapeutic groups (pilot review, migraine and hyperlipidemia drugs). However, in the others therapeutic groups their clinical usefulness and price reasonableness were reviewed respectively without the cost-effectiveness analysis, because the review framework was changed to improve the efficiency of review by the government. Accordingly, the drugs were delisted when the evidence of clinical usefulness were not founded and drugs' prices were the higher than 80 percentile of the highest price among drugs containing the same ingredients. **RESULTS:** As the result of pilot review, 371 drugs (98.1%) were decided to be on the reimbursement drugs list and 7 drugs (1.9%) were delisted. For drugs maintained on the list, 128 drugs (34.5%) had price cut. After the review framework is changed, 557 drugs (4.1%) were delisted and 3,705 drugs (28.7%) had price cut. For drugs delisted, 446 drugs (80.1%) had no clinical usefulness and 111 drugs (19.9%) were delisted because of several reasons such as fact that pharmaceutical companies did not accept to reduce drug prices. As a result, Of the total 13,844 drugs, 564 drugs (4.1%) were delisted and for drugs remained on the list, 3,831 drugs (28.8%) had price cut. **CONCLUSIONS:** This study could be helpful for understanding the currently listed drugs review. In the future, monitoring for the currently listed drugs utilization pattern should be needed.

HEALTH CARE USE & POLICY STUDIES - Health Care Costs & Management

PHP68

THE EFFECT OF RESETTING THE CLOCK IN HEALTH CARE

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OBJECTIVES: The resetting the clock was introduced at the beginning of the last century in Hungary. Since then it has been maintained almost continually. Energy-saving has been the aim of the resetting the clock. The question is what the effect of the spring and fall time-shift for the human body is, how the human body can tolerate the effect of the spring and fall resetting the clock. **METHODS:** The data of the National Health Insurance Fund Administration were summarized from 1999 to 2011. That included 83 million out-patient and 2.7 million inpatient cases. The BNO main diagnoses of the week before resetting the clock were compared to the main diagnoses of the week after resetting the clock. **RESULTS:** The number of the out-patient cases decreased after resetting the clock. The number of the in-patient cases increased after both, the spring end the autumn resetting the clock. The highest increased was showed in the psychiatric patients. After resetting the clock, on Monday, the number of the hospitalized patients doubled. The psychiatric diagnoses, using the BNO code system, were 3.8-fold, the diseases, related to circulatory system was 1.9-fold and the traumatological cases were 1.5-fold after resetting the clock. **CONCLUSIONS:** The economical benefit of resetting the clock can be questioned in the view of the plus 53,000 hospitalized patients (14,000 more circu-